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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/683,760 | 10/10/2003 | Hao Bi | CS23797RA | 5055 |
| 20280 | 7590 | 08/09/2005 | EXAMINER | |
| MOTOROLA INC 600 NORTH US HIGHWAY 45 ROOM AS437 LIBERTYVILLE, IL 60048-5343 | | | | PHU, SANH D |
| | | ART UNIT | | PAPER NUMBER |
| | | 2682 | | |

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|--------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/683,760 | BI, HAO |
| | Examiner | Art Unit |
| | Sanh D. Phu | 2682 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 June 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

This Office Action is responsive to the Amendment filed on 6/15/05.

Claim Rejections – 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Drake, Jr. et al (5,461,611), previously cited.

-Regarding to claims 1 and 7, see figure 3 and col. 9, line 52 to col. 10, line 8, Drake, Jr. et al discloses a method using a message/table comprising:

a step using a service identifier (50–54) for identifying a label (for instance, (52) as the label of the source address of a broadcast content “multimedia data stream”, (53) as the label of the destination of the broadcast content and (54) as the label of traffic descriptors of the broadcast content) for broadcast content on an associated broadcast channel; and

a step using quality indicator information (55, 56) for indicating at least one value for a measure of quality for the associated broadcast channel.

3. Claims 1–9 and 24–27 are rejected under 35 U.S.C. 102(b) as being anticipated by Rappaport et al (20040259555), previously cited.

–Regarding to claims 1 and 7, see figure 9 and sections [0091–0094] and [0097], Rappaport et al discloses a method using a message/table comprising:

a step using a service identifier (802–804) for identifying a label (for instance (803) as the label of transmitter description for a broadcast content, (804) as the label of receiver description of the broadcast content, etc.) for broadcast content on an associated broadcast channel; and

quality indicator information (801, 805) for indicating at least one value for a measure of quality for the associated broadcast channel.

-Regarding to claim 9, Rappaport et al discloses that the quality indicator comprises a signal-to-noise ratio value (threshold) (SNR) (see figure 9).

-Regarding to claims 2 and 5, Rappaport et al discloses an indication whether the associated broadcast channel exceeds a signal to noise ratio (SNR) threshold (for instance, quality indicator SNR=4.35 exceeds the minimum SNR=4.3, etc) (see figure 9).

-Regarding to claims 3 and 6, Rappaport et al disclose that the quality indicator comprises a minimum signal-to-noise ratio value (=4.3) (see figure 9).

Regarding to claim 4, Rappaport et al disclose that the quality indicator can comprise a ratio (SIR) (see section [0032]).

-Regarding to claim 8, Rappaport et al discloses that the quality indicator can comprise a SNR and a ratio (SIR) (see section [0032]).

-Regarding to claim 24, see figure 9 and sections [0091-0094] and [0097], Rappaport et al discloses a wireless communication device "mobile device" (see section [0097]) wherein the wireless communication device comprises:

a transceiver (inherently included, e.g. in a case the wireless communication device is cellular telephone (see section [0005]);
a controller “operating system” coupled to the transceiver (the controller inherently included, e.g. in a case the wireless communication device is cellular telephone) (see also section [0097]);

a user interface couple to the controller, (the user interface controller inherently included, e.g. in a case the wireless communication device is cellular telephone);

a memory coupled to the controller, for storing a quality table (see figure 9) mapping a service identifier (803, 804) associated with a broadcast content label, (for instance (803) as the label of transmitter description for a broadcast content, (804) as the label of receiver description of the broadcast content, etc.), to a quality indicator (801, 805) (see also section [0097]).

-Regarding to claims 25 and 27, Rappaport et al discloses that the quality indicator comprises a signal-to-noise ratio value (threshold) (801) (see figure 9).

-Regarding to claim 26, Rappaport et al discloses that the quality indicator can comprise a ratio (SIR) (see section [0032]).

Claim Rejections – 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2–6 and 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drake, Jr. et al.

-Regarding to claim 9, Drake, Jr. et al does not disclose whether the quality indicator information comprises a signal-to-noise ratio value (threshold). However, using signal strengths, signal-to-noise ratio values, etc., to indicate a transmission quality of a channel is well-known in the art, and the examiner takes Official Notice.

It would have been obvious for a person skilled in the art, within his skills and upon system requirement or upon his design preference, to implement

Drake, Jr. et al in such a way that the quality indicator information would also comprise signal-to-noise ratio values in order to indicate the transmission quality of the broadcast channel, without affecting the overall system performance.

-Regarding to claims 2 and 5, Drake, Jr. et al discloses an indication whether the associated channel exceeds a quality indicator information threshold “minimum quality of service” (see col. 10, lines 4–8, lines 35–51). Drake, Jr. et al does not disclose whether the quality indicator information threshold comprises a signal-to-noise ratio value. However, using signal strengths, signal-to-noise ratio values, etc., to indicate a transmission quality of a channel is well-known in the art, and the examiner takes Official Notice.

It would have been obvious for a person skilled in the art, within his skills and upon system requirement or upon his design preference, to implement Drake, Jr. et al in such a way that the quality indicator information threshold would also comprise signal-to-noise ratio values in order to indicate the transmission quality of the broadcast channel, without affecting the overall system performance.

-Regarding to claims 3 and 6, as applied in claim 2, said signal-to-noise ratio value could be a minimum acceptable quality (see (56) of figure 3).

-Regarding to claim 4, Drake, Jr. et al discloses that the quality indicator information threshold comprises a ratio (see col. 5, lines 53–58).

-Claim 8 is rejected with similar reasons set forth for claims 2 and 4.

6. Claims 10–20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (20040047323) (previously cited) in view of Drake, Jr. et al.

-Regarding to claim 10, see figures 1–3 and sections [0018–0035], Park et al discloses a method comprising:

step (100) (see figure 1) of measuring a quality indicator to form a calculated quality indicator “signal strength” of a broadcast channel of a plurality of broadcast channels (see (S100) of figure 3);

step (100) of comparing said calculated quality indicator to a quality indicator threshold “reference value” (see (S104) of figure 3).

Park et al does not disclose steps of receiving a service parameter message, and determining quality indicator threshold, as claimed.

Drake, Jr. et al discloses steps (20) (see figure 1) of receiving from a remote station (10) a service parameter message (see figure 3) with a broadcast content service identifier (50–54) associated with a broadcast channel (for instance, (52) as an identifier label of the source address of a broadcast content “multimedia data stream”, (53) as an identifier label of the destination of the broadcast content and (54) as an identifier label of traffic descriptors of the broadcast content); and determining a quality indicator threshold (55, 56) from the service parameter message for a further use (see figures 1–3 and col. 4, line 17 to col. 10, line 18).

Since Park et al is silent about how the quality indicator threshold is obtained, and each broadcast channel of the plurality of broadcast channels (e.g., (WLAN_3, WLAN_5) (see figure 2) may have its own required quality indicator threshold, it would have been obvious for a person skilled in the art, within his skills, and upon the system requirement or his design preference, to implement steps of receiving from a broadcast station or a remote associated station a service parameter message with a service identifier associated with the broadcast channel for a further use; and determining the quality indicator

threshold required for the broadcast channel from the service parameter message, as taught by Drake, Jr. et al, so that the quality indicator threshold would be obtained for comparing with the calculated quality indicator, without affecting the overall system performance.

-Regarding to claim 11, Park et al in view of Drake, Jr. et al teaches step (25) of extracting quality indicator threshold from the service parameter (see Drake, Jr. et al, col. 8, lines 43–62).

-Regarding to claims 12 and 15, Park et al in view of Drake, Jr. et al does not disclose obtaining a signal to noise ratio value (threshold) and an associated signal ratio.

Obtaining signal strengths, signal-to-noise ratio values, other associated signal ratios, etc., to indicate a transmission quality of a channel is well-known in the art, and the examiner takes Official Notice.

It would have been obvious for a person skilled in the art, within his skills and upon system requirement or upon his design preference, to implement Park et al in view of Drake, Jr. et al in such a way that the system also obtain signal-to-noise ratio values and associated signal ratios in order to indicate the

transmission quality of the broadcast channel, without affecting the overall system performance.

-Regarding to claim 13, Park et al in view of Drake, Jr. et al does not disclose step of measuring a pilot signal to noise ratio to form a calculated quality indicator by multiplying the pilot signal to noise ratio by a factor and an associated signal ratio. However, measuring a pilot signal to noise ratio to form a calculated quality indicator by multiplying a pilot signal to noise ratio by a factor and an associated signal ratio is a conventional way for measuring a transmission quality, and the examiner takes Official Notice. Therefore, for an application, it would have been obvious for a person skilled in the art to implement Park et al system in view of Drake Jr. et al, within his skills and upon the system requirement or his design preference, an additional step of measuring a pilot signal to noise ratio to form a calculated quality indicator by multiplying a pilot signal to noise ratio by a factor and an associated signal ratio in order to obtain an additional transmission quality, without affecting the system performance.

-Regarding to claim 14, as applied to claim 13, Park et al system in view of Drake, Jr. et al is capable of performing step of determining if the calculated quality indicator is less than the signal to noise ratio threshold (see Park et al, (S104) of figure 3).

-Regarding to claim 16, Park et al in view of Drake, Jr. et al does not disclose step of measuring a pilot signal to noise ratio to form a calculated quality indicator. However, measuring a pilot signal to noise ratio to form a calculated quality indicator is well known in the art, and the examiner takes Official Notice. Therefore, for an application, it would have been obvious for a person skilled in the art to implement Park et al system in view of Drake Jr. et al, within his skills and upon the system requirement or his design preference, an additional step of measuring a pilot signal to noise ratio to form a calculated quality indicator in order to obtain an additional transmission quality, without affecting the system performance.

-Regarding to claim 17, as applied to claim 16, Park et al system in view of Drake, Jr. et al is capable of performing step of determining if the calculated

quality indicator is greater than the signal to noise ratio threshold (see Park et al, (S104) of figure 3).

-Regarding to claim 18, as applied to claim to claim 10, Park et al system in view of Drake, Jr. et al is capable of obtaining the quality indicator threshold, associated with the service identifier, from a table in a memory after the quality indicator threshold being received in the service parameter message and stored for a later use (see Park et al, section [0038]).

-Claims 19 and 20 are rejected with similar reasons set forth for claims 12 and 15.

7. Claims 21–23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al in view of Drake, Jr. et al, and further in view of Jollota et al (2004/0142699), previously cited.

-Regarding to claim 21, Park et al in view of Drake, Jr. et al does not disclose step of presenting a result of the comparing step in a user interface.

Jollota et al discloses step of presenting a results of step of comparing a measured transmission quality with a threshold in a user interface (see figure 4A–4F, and sections [0033–0043].

It would have been obvious for a person skilled in the art to implement Park et al system in view of Drake, Jr. et al with step of presenting a results of step of comparing a measured transmission quality with a threshold in a user interface, as taught by Jollota et al, so that the user is able to view, analyze and make decisions on the presented results.

-Regarding to claim 22, as applied for claim 21, Park et al system in view of Drake, Jr. et al and Jollota et al is capable of displaying a label (465, 466) associated with the service identifier; and displaying an indicator (470) indicating whether the calculated quality indicator is less than the quality indicator threshold (see Jollota et al, figure 4E).

-Regarding to claim 23, as applied for claim 21, Park et al system in view of Drake, Jr. et al and Jollota et al is capable of displaying an indicator (470) indicating whether the calculated quality indicator is greater than the quality indicator threshold (see Jollota et al, figure 4E).

Response to Arguments

8. Applicant's arguments filed on 6/15/05 have been fully considered but they are not, in part, persuasive.

-The rejection, under 35 USC 101, to claims 1–9 has been withdrawn since the claims were amended to overcome the rejection.

-Applicant's arguments with respect to rejections, under 35 USC 102 and 103, to respective claims 1–26 are not persuasive.

The applicant mainly argues that (i) with respect to claims 1 and 7, Drake, Jr. et al does not disclose “identifying a label for broadcast content on an associated broadcast channel” as recited in claim 1 or “identifying a label for broadcast content on a broadcast channel” as recited in claim 7; (ii) with respect to claims 1 and 7, Rappaport et al does not disclose “identifying a label for broadcast content on an associated broadcast channel” as recited in claim 1 or “identifying a label for broadcast content on a broadcast channel” as recited in claim 7, (iii) with respect to claim 24, Rappaport et al does not disclose “a service identifier associated with a broadcast content label” and (iv) with respect to claim 10, neither Park et al nor Drake, Jr et al discloses “receiving a service parameter message with a broadcast content service identifier associated with a broadcast channel.

The examiner respectfully disagrees. Note that the rejections are made based on the limitations given in the respective claims.

Regarding to part (i), see figures 1 and 3, Drake, Jr. et al discloses a service identifier (50–54) (see figure 3) for identifying a label (for instance, (52) as the label of the source address of a broadcast content “multimedia data stream”, (53) as the label of the destination of the broadcast content and (54) as the label of traffic descriptors of the broadcast content) for broadcast content on an associated broadcast channel (17) (see figure 1). Further claims 1 and 7 do not have other limitations for further defining the “label” in the claims in order to make the “label” in claims distinguishable from Drake, Jr. et al (52) as the label of the source address of a broadcast content “multimedia data stream”, Drake, Jr. et al (53) as the label of the destination of the broadcast content and Drake, Jr. et al (54) as the label of traffic descriptors of the broadcast content.

Regarding to part (ii), see figure 9, Rappaport et al discloses a service identifier (802–804) for identifying a label (for instance, (803) as the label of transmitter description for a broadcast content, (804) as the label of receiver

description of the broadcast content, etc.) for broadcast content on an associated broadcast channel (for instance, over an air interface IEEE 80211b). Further claims 1 and 7 do not have other limitations for further defining the "label" in the claims in order to make the "label" in claims distinguishable from Rappaport et al (803) as the label of transmitter description for a broadcast content and Rappaport et al (804) as the label of receiver description of the broadcast content.

Regarding to part (iii), as being explained in part (ii), Rappaport et al discloses a service identifier (802–804) associated with a broadcast content label in such a way that service identifier (802–804) is for identifying a label (for instance, (803) as the label of transmitter description for a broadcast content, (804) as the label of receiver description of the broadcast content, etc.) for broadcast content on an associated broadcast channel (for instance, over an air interface IEEE 80211b).

Regarding to part (iv), see figures 1 and 3, Drake, Jr. et al discloses steps (20) (see figure 1) of receiving from a remote station (10) a service parameter message (see figure 3) with a broadcast content service identifier (50–54)

associated with a broadcast channel (17) (for instance, (52) as an identifier label of the source address of a broadcast content “multimedia data stream”, (53) as an identifier label of the destination of the broadcast content and (54) as an identifier label of traffic descriptors of the broadcast content).

Based on the above rationale, it is believed that the limitations of claims are still met and therefore, the rejections are still maintained.

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In

no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D. Phu whose telephone number is (571)272-7857. The examiner can normally be reached on 8:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Sanh D. Phu
Examiner
Art Unit 2682

SP



NICK CORSARO
PRIMARY EXAMINER